

## **Amendments to the Claims**

1. (Original) A package packaging an item and defining a closed environment in which the item is enclosed, the packaging including an oxygen-scavenging element which includes a photo-activatable semiconductor and an electron donor, wherein the semiconductor, whilst exposed to ultra-bandgap light, generates electron-hole pairs, with the electrons acting to reduce oxygen, and thereby scavenge the same from the closed environment, and the holes combining with electrons sacrificed by the electron donor.
2. (Original) The package of claim 1, wherein the electron donor comprises an organic material.
3. (Original) The package of claim 2, wherein the organic material comprises a polymeric material.
4. (Original) The package of claim 3, wherein the polymeric material comprises PVA, PVC, PEG, polyethylene oxide, hydroxyethyl cellulose, or a mixture thereof.
5. (Original) The package of claim 2, wherein the organic material comprises an amine.
6. (Original) The package of claim 5, wherein the amine comprises EDTA, triethylamine, or a mixture thereof.
7. (Original) The package of claim 2, wherein the organic material comprises an alcohol.
8. (Original) The package of claim 2, wherein the organic material comprises a thiol.

9. (Original) The package of claim 2, wherein the organic material comprises an aldehyde.
10. (Previously Presented) The package of claim 1, wherein the electron donor comprises a liquid.
11. (Previously Presented) The package of claim 1, wherein the electron donor comprises a solid.
12. (Previously Presented) The package of claim 1, wherein the electron donor comprises a gas.
13. (Previously Presented) The package of claim 1, wherein the electron donor comprises a vapor.
14. (Previously Presented) The package of claim 1, wherein the semiconductor comprises an oxide semiconductor.
15. (Original) The package of claim 14, wherein the semiconductor comprises  $\text{TiO}_2$ .
16. (Original) The package of claim 14, wherein the semiconductor comprises  $\text{ZnO}$ .
17. (Original) The package of claim 14, wherein the semiconductor comprises  $\text{WO}_3$ .
18. (Original) The package of claim 14, wherein the semiconductor comprises at least two of  $\text{TiO}_2$ ,  $\text{ZnO}$  and  $\text{WO}_3$ .
19. (Previously Presented) The package of claim 1, wherein the oxygen-scavenging element comprises a suspension containing the semiconductor.

20. (Previously Presented) The package of claim 1, wherein the oxygen-scavenging element comprises a paste containing the semiconductor.
21. (Previously Presented) The package of claim 1, wherein the oxygen-scavenging element comprises a gel containing the semiconductor.
22. (Previously Presented) The package of claim 1, wherein the oxygen-scavenging element comprises a solid containing the semiconductor.
23. (Original) The package of claim 22, wherein the oxygen-scavenging element comprises a block containing an activatable semiconductor.
24. (Original) The package of claim 22, wherein the oxygen-scavenging element comprises a layer containing an activatable semiconductor.
25. (Original) The package of claim 22, wherein the oxygen-scavenging element comprises a powder containing an activatable semiconductor.
26. (Previously Presented) The package of claim 1, wherein the oxygen-scavenging element comprises an encapsulating layer encapsulating at least a surface of the item.
27. (Previously Presented) The package of claim 1, wherein the packaging comprises a film packaging defined at least in part by the oxygen-scavenging element.
28. (Previously Presented) The package of claim 1, wherein the packaging includes an open-topped container and the oxygen-scavenging element comprises a film which closes the container.

29. (Previously Presented) The package of claim 1, wherein the packaging includes a closed container and the oxygen-scavenging element is disposed within the container.
30. (Previously Presented) The package of claim 1, wherein the item comprises an electronic device.
31. (Previously Presented) The package of claim 1, wherein the item comprises an opto-electronic device.
32. (Currently Amended) The package of claim ~~30~~1, wherein the item comprises a molecular device.
33. (Currently Amended) The package of claim ~~30~~1, wherein the item comprises a polymeric device.
34. (Previously Presented) The package of claim 1, wherein the item comprises a foodstuff.
35. (Currently Amended) A method of scavenging oxygen from a closed environment, comprising the steps of:  
~~Use of~~ providing an oxygen-scavenging element including a photo-activatable semiconductor and an electron donor in a package, which packages an item and defines a closed environment in which the item is enclosed;; and  
exposing the oxygen-scavenging element to ultra-bandgap light to photo-activate the photo-activatable semiconductor and scavenge oxygen from the closed environment ~~whilst exposed to ultra-bandgap light.~~